

claims

We claim:

1. A circuit device (1), with at least one connection
5 (3b), to which a clock pulse ($/CLK$, $/CLK_T$) can be applied, characterized in that the circuit device (1) also comprises a clock pulse detection facility (2) to determine whether there is a clock pulse ($/CLK$, $/CLK_T$) present at the connection (3b).

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2. A circuit device (1) with at least one further connection (3a), to which a further clock pulse (CLK , CLK_T) can be applied, whereby in determining whether a clock pulse ($/CLK$, $/CLK_T$) is present at the connection (3b),
15 it is determined whether there are differential clock pulses (CLK , CLK_T ; $/CLK$, $/CLK_T$) present at the connections (3a, 3b), or whether there is a single clock pulse (CLK , CLK_T) present at the further connection (3a), but not at the connection (3b).

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3. A circuit device (1) according to Claim 1 or 2, which comprises a comparison device (24) for comparing the signal present at the connection (3b), in particular the clock pulse ($/CLK$, $/CLK_T$) applied thereto, with a reference signal (VREF).
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4. A circuit device (1) according to claim 3, in which the comparison device (24) comprises a differential amplifier.

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5. A circuit device (1) according to Claim 3 or 4, in which the comparison device (24) emits a pulse, more

specifically a clock pulse detection signal, when the level of the signal present at the connection (3b) exceeds or falls below a predetermined level (VREF), in particular, the level of the reference signal (VREF).

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6. A circuit device (1) according to one of Claims 3 to 5, in which the comparison device (24) emits a signal, more specifically a clock pulse detection signal, when the level of the signal present at the connection (3b) first

10 exceeds a predetermined, first level ($V_{REF} + \Delta U_1$), and then falls below a predetermined second level ($V_{REF} - \Delta U_2$) that differs from the first level.

15 7. A circuit device (1) according to one of Claims 3 to 5, in which the comparison device (24) then emits a pulse, more specifically a clock pulse detection signal, when the level of the signal present at the connection (3b) first falls below a predetermined first level and then exceeds a predetermined second level that differs from

20 the first level.

25 8. A circuit device (1) according to one of the above claims, which also comprises a counter device (7), in particular for detecting the number of pulse, particularly clock pulse detection signals, emitted by the comparison device (24).

30 9. A circuit device (1) according to Claim 8, in which, when the number (Z) of pulse, in particular clock pulse detection signals emitted by the comparison device (24), and detected by the counter device (7), is larger then or equal to a predetermined number (Z_0), it is deter-

mined that a clock pulse ($/CLK$, $/CLK_T$) is present at the connection (3b).

10. A semi-conductor component that comprises at least one
5 circuit device (1) according to one of the claims 1 to
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11. A semi-conductor component according to Claim 10, which
is a DDR (double data rate) component, in particular a
10 DDR memory component.

12. A semi-conductor component according to Claim 10, in
which the memory component is a DRAM (dynamic random ac-
cess memory).